Math 142, Sections 5 and 6 Calculus II Fall 2014

Instructor: Prof. Adela Vraciu

office: LeConte 300H; **email:** vraciu@math.sc.edu

Office Hours: Tuesday and Thursday 2–3:30pm, or by appointment.

Textbook: *Calculus, Early Transcendentals, 6th Edition* by James Stewart. We will cover Chapters 6, 7, 10 and 11.

Grades: The following table shows how each component of the course counts toward your final grade:

Three exams during the semester	3× 10 %=30%
Final Exam	25%
Quizzes	30%
Maple Labs	15 %

A 90/80/70 scale (possibly with small adjustments in the students' favor) will be used when assigning letter grades.

Exams: The following are the dates for the three exams that take place during the semester:

Exam 1: September 25; **Exam 2:** October 28; **Exam 3:** November 20.

Final Exam: December 9, 12:30–3pm..

No exam scores are dropped. In case of documented illness, a make-up test will be given. I will replace the lowest exam score with the score on the final exam if this works in the student's favor.

Homework: Homework will be assigned every day, but it will not be collected or graded. Instead, there will be a quiz in the beginning of the following class consisting of one of the problems previously assigned for homework.

Quizzes: See *Homework*. No make-up quizzes are allowed. The lowest two quiz scores will be dropped.

Maple Labs: Your score for the Maple lab component of the course is based on quizzes and projects. Details will be provided by your lab instructor.

Miscellaneous: **Graphing calculators:** not required. You will not be allowed to use graphing calculators during quizzes and exams.

Prerequisites: Qualification through placement or a grade of C or better in Math 141.

Last Day to Drop without a grade of "WF" being recorded: October 9.

The Math Tutoring Center (LC 105) is a free tutoring service for all 100-level math courses. No appointment is necessary. The center also maintains a list of private tutors.

Students with disabilities: Please let me know if you have a disability that makes special arrangements necessary.

Learning Outcomes: Students should begin to develop as independent learners with the ability to approach problems from a conceptual point of view and apply appropriate calculus skills to problems in context.

The successful student will master concepts and gain skills related to the following topics:

techniques of integration (substitution, integration by parts, trigonometric integrals and trigonometric substitution, partial fractions), improper integrals, applications of integration (area, volume by disks and shells, average value), convergence of sequences and series (the nth term test, integral test, comparison test, ratio test, root test, alternating series test), power series, Taylor and Maclaurin series, applications of Taylor polynomials.